The McKnight Foundation

- Established 1953
- William and Maude McKnight – 3M Corp.
- Largest private family foundation in MN
- Assets: $2.2 billion
- Grants: $94 million in 2007

McKnight's Environment Program

- 15% of total, encompassing 13 states
- 1/3 to Energy Foundation: 7 states
- 2/3 Mississippi River Program: 10 states
- $73 M for Mississippi River since 1992


Missouri
Upper Mississippi
Ohio
Arkansas-Red-White
Tennessee
Lower Mississippi
Hypoxic Zone
Gulf of Mexico

Mississippi River Program Objectives:

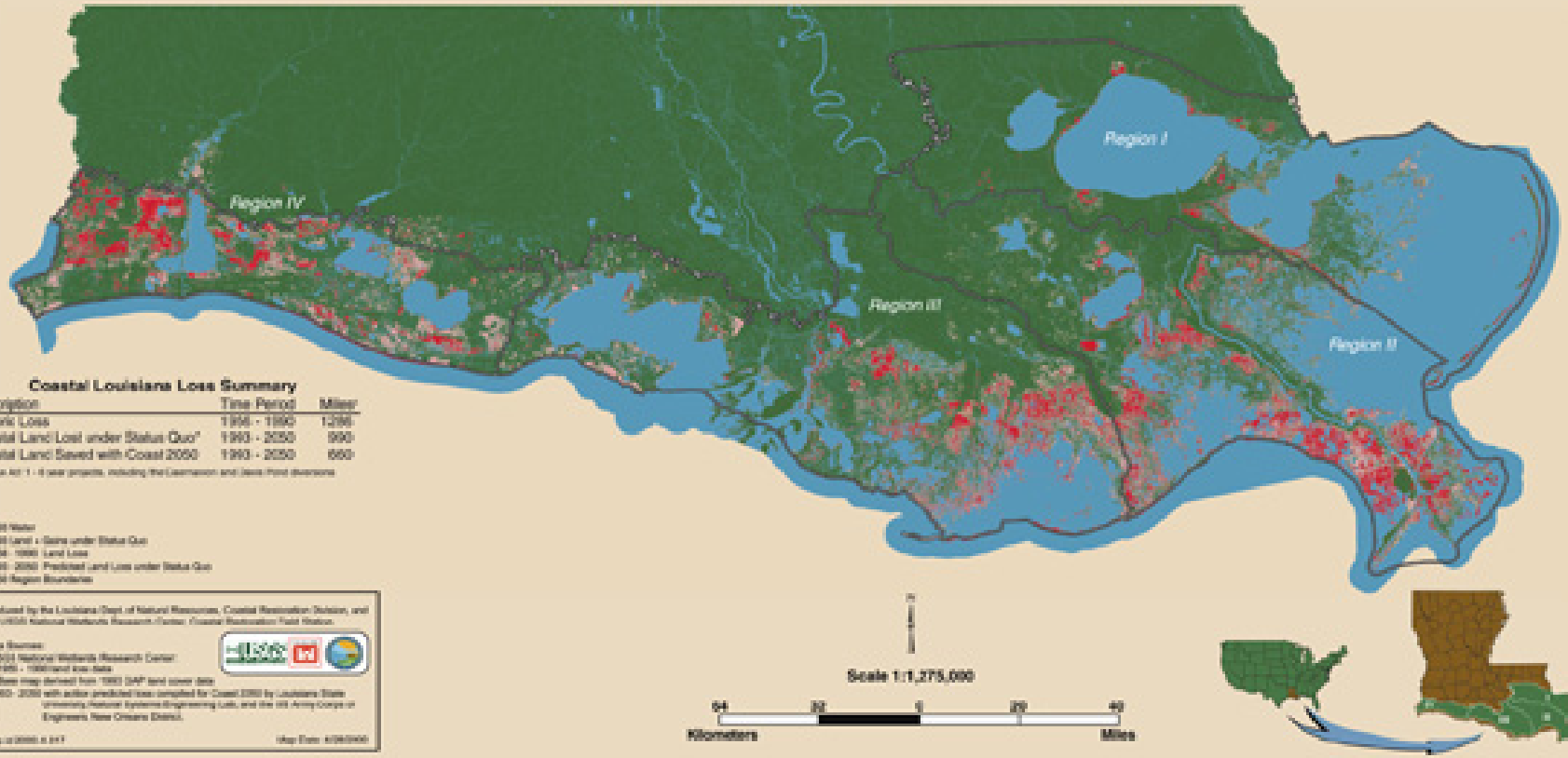
- Land-conserving/restoring to improve water quality
- Water – improving enforcement & restoration
- People - strengthening river advocacy

- **Methods:**
- Direct, responsive grantmaking
- Advancing the field, increasing capacity
- Transforming systems that impede progress

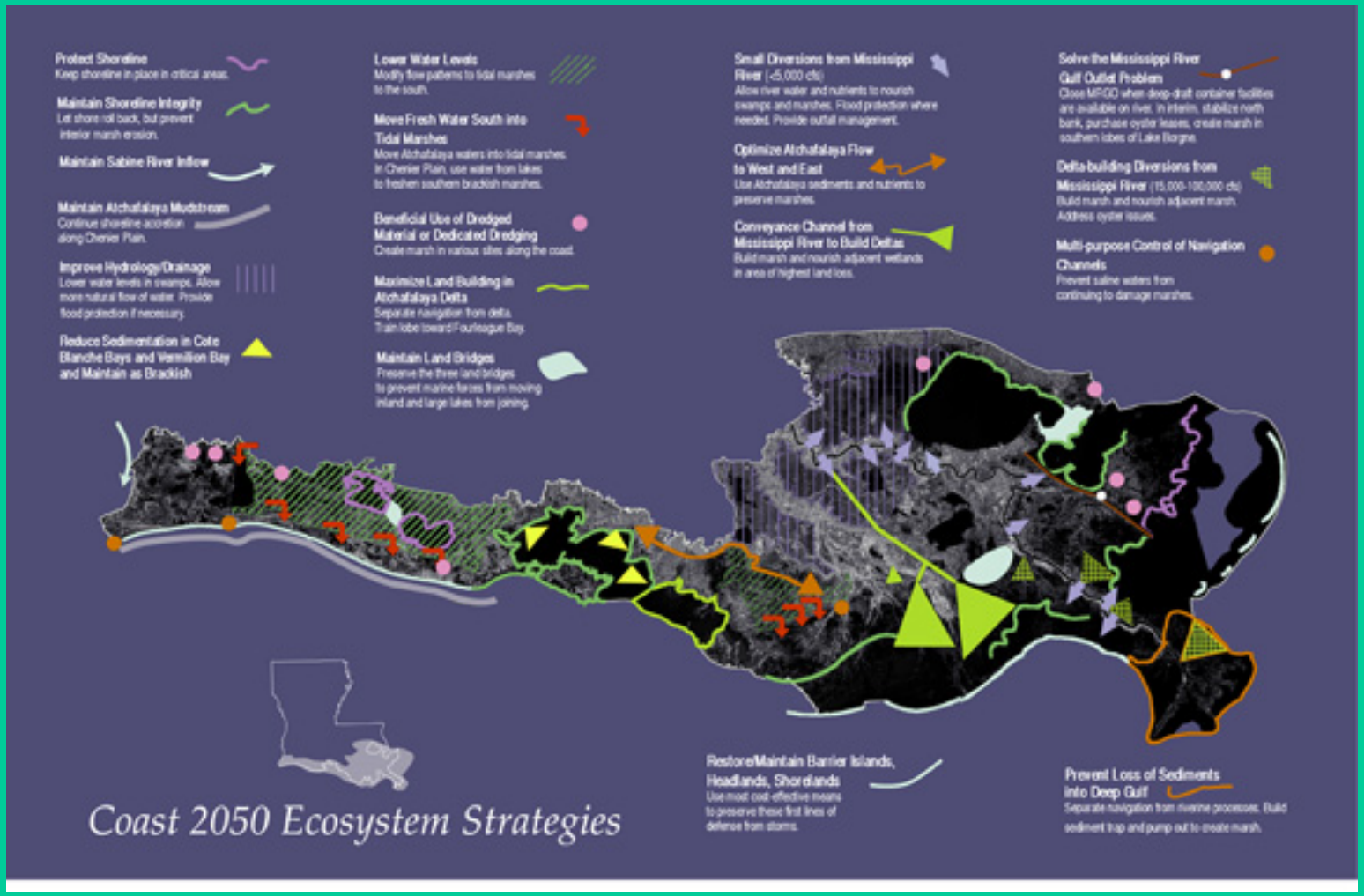
35 LOCKS AND DAMS

MISSOURI AND MISSISSIPPI

Coastal Louisiana
Existing and Predicted Land Loss Trends
1956 - 2050



COAST 2050 PLAN


Protect Shoreline
Keep shoreline in place in critical areas.
Maintain Shoreline Integrity
Let shore roll back, but prevent interior marsh erosion.
Maintain Sabine River Inflow
Maintain Atchafalaya Mudstream
Continue shoreline accretion along Chenier Plain.
Improve Hydrology/Drainage
Lower water levels in swamps. Allow more natural flow of water. Provide flood protection if necessary.
Reduce Sedimentation in Cote Blanche Bays and Vermilion Bay and Maintain as Brackish
Lower Water Levels
Modify flow patterns to tidal marshes to the south.
Move Fresh Water South into Tidal Marshes
Move Atchafalaya waters into tidal marshes. In Chenier Plain, use water from lakes to freshen southern brackish marshes.
Beneficial Use of Dredged Material or Dedicated Dredging
Create marsh in various sites along the coast.
Maximize Land Building in Atchafalaya Delta
Separate navigation from delta. Train lobe toward Fourleague Bay.
Maintain Land Bridges
Preserve the three land bridges to prevent marine forces from moving inland and large lakes from joining.
Small Diversions from Mississippi River (<5,000 cfs)
Allow river water and nutrients to nourish swamps and marshes. Flood protection where needed. Provide outfall management.
Optimize Atchafalaya Flow to West and East
Use Atchafalaya sediments and nutrients to preserve marshes.
Conveyance Channel from Mississippi River to Build Deltas
Build marsh and nourish adjacent wetlands in area of highest land loss.
Solve the Mississippi River Gulf Outlet Problem
Close MRGO when deep-draft container facilities are available on river. In interim, stabilize north bank, purchase oyster leases, create marsh in southern lobes of Lake Borgne.
Delta-building Diversions from Mississippi River (15,000-100,000 cfs)
Build marsh and nourish adjacent marsh. Address oyster issues.
Multi-purpose Control of Navigation Channels
Prevent saline waters from continuing to damage marshes.
Restore/Maintain Barrier Islands, Headlands, Shorelands
Use most cost-effective means to preserve these first lines of defense from storms.
Prevent Loss of Sediments into Deep Gulf
Separate navigation from riverine processes. Build sediment trap and pump out to create marsh.
Coast 2050 Ecosystem Strategies

100 NGOs/year

Changing people's relationship with the Mississippi River

1. It’s the “Corps of Restorationists”
2. Farm programs reduce pollution to river
3. River communities are tourism destinations
4. Gulf of Mexico is a very different place
    - Dead Zone disappears;
    - Coastal Louisiana grows,
    - people live and work in ways that benefit those living downstream.

Challenges to Federal Agencies

- New Law
- New Reports
- Pending Legislation

Challenges to Federal Agencies

Swiftly implement and uphold reforms in Water Resources Development Act:

- »Independent Review
- »Updating P&G
- »Mitigate Damages

Challenges to Federal Agencies

Use National Academies' reports to:

- »Strengthen your positions
- »Uphold your authorities
- »Foster innovation

National Research Council of the National Academies

- Water and Biofuels, 10-10 (< 1 yr.)
- Mississippi River Water Quality & the Clean Water Act, 10-16 (2+2)

Biofuels and Water Quality:

- Mississippi River harmed
- Likelihood of greater harm is considerable
- Look at other crops than corn

Biofuels and Water Quantity:

- 100 M gpd = 5,000 population
- WSJ: slurping sound from the MW

Miss. River WQ & Clean Water Act

- USEPA failed & river is “orphan”
- CWA jurisdiction 200 miles into the Gulf of Mexico
- Runoff from farms largely unregulated and greatest source of pollution

Report Recommendations – Challenges to Federal Agencies

- Set pollution limit for the Gulf
- Require state pollution standards
- EPA and USDA target farm program payments to reduce pollution

Conclusion: Challenges to Federal Agencies

- Use www.mcknight.org handout to order both NRC reports tomorrow.
- Watch McKnight website in ’08 for a User’s Guide to the CWA report
- Pay attention to WRDA reforms